



KHX2000C9D3T1K3/3GX

**3GB (1GB 128M x 64-Bit x 3 pcs.) DDR3-2000MHz
CL9 240-Pin DIMM Kit**

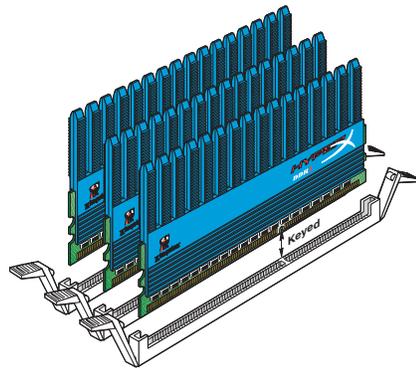
DESCRIPTION:

Kingston's KHX2000C9D3T1K3/3GX is a kit of three 128M x 64-bit 1GB (1024MB) DDR3-2000MHz CL9 SDRAM (Synchronous DRAM) memory modules, based on eight 128M x 8-bit DDR3 FBGA components per module. Each module kit supports **Intel® XMP** (Extreme Memory Profiles). Total kit capacity is 3GB. Each module kit has been tested to run at DDR3-2000MHz at a low latency timing of 9-9-9 at 1.65V. The SPDs are programmed to JEDEC standard latency DDR3-1333MHz timing of 9-9-9 at 1.5V. Each 240-pin DIMM uses gold contact fingers and requires +1.5V. The JEDEC standard electrical and mechanical specifications are as follows:

FEATURES:

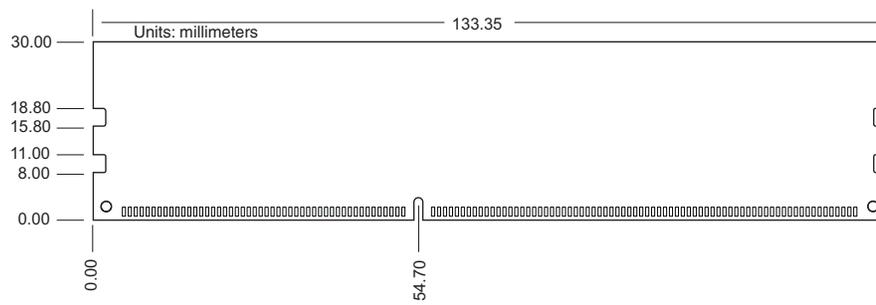
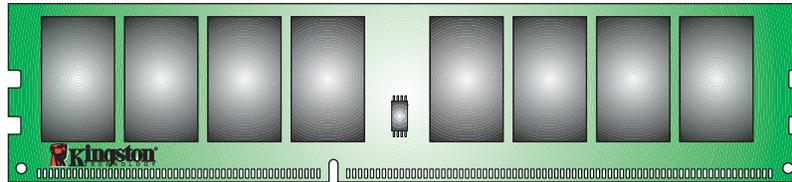
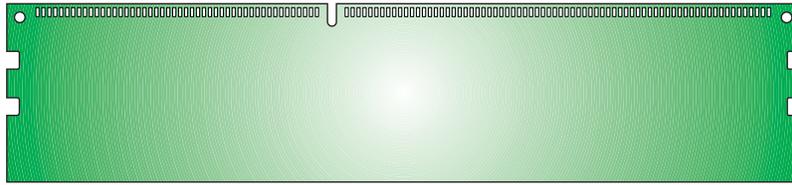
FEATURES:

- JEDEC standard 1.5V ± 0.075V Power Supply
- VDDQ = 1.5V ± 0.075V
- 667MHz fCK for 1333Mb/sec/pin
- 8 independent internal bank
- Programmable CAS Latency: 5,6,7,8,9,10
- Posted CAS
- Programmable Additive Latency: 0, CL - 2, or CL - 1 clock
- Programmable CAS Write Latency(CWL) = 7(DDR3-1333)
- 8-bit pre-fetch
- Burst Length: 8 (Interleave without any limit, sequential with starting address "000" only), 4 with tCCD = 4 which does not allow seamless read or write [either on the fly using A12 or MRS]
- Bi-directional Differential Data Strobe
- Internal(self) calibration : Internal self calibration through ZQ pin (RZQ : 240 ohm ± 1%)
- On Die Termination using ODT pin
- Average Refresh Period 7.8us at lower then TCASE 85°C, 3.9us at 85°C < TCASE . 95°C
- Asynchronous Reset
- PCB : Height 1.180" (30.00mm), single sided component



PERFORMANCE:

- | | |
|--|--------------------------------|
| <input checked="" type="checkbox"/> CL(IDD) | 9 cycles |
| <input checked="" type="checkbox"/> Row Cycle Time (tRCmin) | 49.5ns (min.) |
| <input checked="" type="checkbox"/> Refresh to Active/Refresh Command Time (tRFCmin) | 110ns |
| <input checked="" type="checkbox"/> Row Active Time (tRASmin) | 36ns (min.) |
| <input checked="" type="checkbox"/> Power | 1.080 W (operating per module) |
| <input checked="" type="checkbox"/> UL Rating | 94 V - 0 |
| <input checked="" type="checkbox"/> Operating Temperature | 0° C to 85° C |
| <input checked="" type="checkbox"/> Storage Temperature | -55° C to +100° C |

MODULE DIMENSIONS:

w/ heatsink assembly

